ABSTRACT

A wind-driven power-generating apparatus having a plurality of sails which upon the action of the force of the wind are caused to move in unison linearly in a horizontal, or in a vertical direction and essentially perpendicular to the direction of the wind, wherein the leading ends of each of said sails are pivotally attached to an upper as well as to a lower sprocket-type chain engaging spatially disposed sprocket wheels so as to maintain said chains in a taught condition, while the trailing ends of said sails are similarly attached to said two chains through swiveling brackets permitting each sail to react to the force of the wind and cause the horizontal (or vertical) motion of the sails/chain assembly, and wherein said sprocket-type wheels are inclined so as to bring about a change in elevation of the sails in the downwind side versus the upwind side of the apparatus. The axis of at least one of said sprocket wheels is connected through a gear train to an electric power generator to convert the rotational energy of the apparatus to electricity.